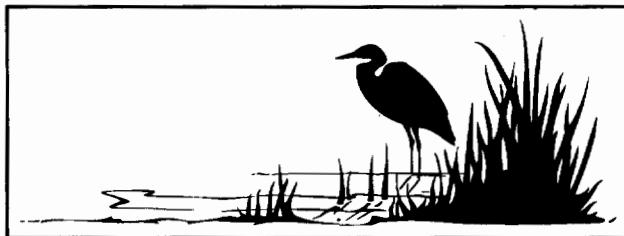


**NEW HAMPSHIRE
LAKES MANAGEMENT AND PROTECTION PROGRAM**



**LAKES MANAGEMENT CRITERIA
FOR NEW HAMPSHIRE STATE AGENCIES**

**prepared by:
New Hampshire Lakes Management Advisory Committee
and the
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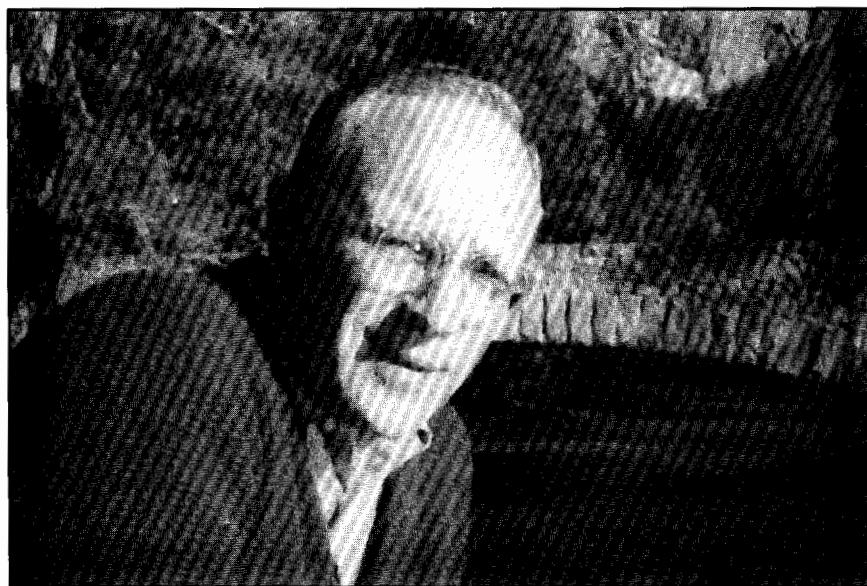
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MAY 1996

IN MEMORIAM



*The Lakes Management Criteria
for New Hampshire State Agencies*
is dedicated to the memory of

Sydney Howe
of Holderness

For years, Syd donated his energies to lake initiatives in New Hampshire. As a member of the Lakes Management Advisory Committee, Syd contributed his time, talent and appreciation for lakes to the efforts of the Committee.

His expertise, knowledge and devotion are reflected in this document and numerous other programs in New Hampshire.

**NEW HAMPSHIRE
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PREAMBLE

The New Hampshire Lakes Management and Protection Program commenced in 1992. Since then, the Lakes Management Advisory Committee with technical assistance from the Lakes Coordinator of the New Hampshire Department of Environmental Services has researched and discussed a variety of issues pertaining to lakes in the state. As a result of this extensive effort to understand these numerous and often complicated issues, the committee agreed at its February 1995 meeting that to maintain the quality of the state's lakes, the following seven components of lake management must be more aggressively addressed.

THE ECONOMIC VALUE OF NEW HAMPSHIRE'S LAKES, WITH REFERENCE TO REAL ESTATE AND PROPERTY TAX VALUES, TO RECREATION INDUSTRY REVENUES, AND TO OTHER REVENUES, RELIES UPON THE SUSTAINED QUALITY OF THE LAKE RESOURCES CONSIDERED IN THIS REPORT.

LAKE SHORELANDS MUST BE PROTECTED FROM INAPPROPRIATE AND POOR DEVELOPMENT BY THE CONSERVATION OF WETLANDS AND OTHER NATURAL AREAS, THROUGH GOVERNMENT AND NONPROFIT PROGRAMS AND BY THE IMPLEMENTATION AND ENFORCEMENT OF APPLICABLE LAWS.

HEALTHY, FUNCTIONING LAKE WATERSHEDS MUST BE MAINTAINED, THROUGH LOCAL REGULATIONS TO CURB RUNOFF, EROSION AND POLLUTION, THROUGH LANDOWNER ASSISTANCE PROGRAMS, AND BY OTHER STATE AND LOCAL CONTROLS.

INCREASED EFFORTS MUST BE MADE TO RESTORE AND MAINTAIN LAKE WATER QUALITY THREATENED BY SEPTIC SYSTEM DRAINAGE, FERTILIZERS AND ROADWAY RUNOFF.

IMPACTS OF LAKE RECREATION UPON WILDLIFE AND AQUATIC HABITATS MUST BE MINIMIZED.

CONFLICTS AMONG RECREATIONAL ACTIVITIES MUST BE REDUCED, BOTH TO PROTECT RESOURCES AND TO ALLOW MAXIMUM PUBLIC ENJOYMENT OF NEW HAMPSHIRE'S PUBLIC WATERS.

NEW INITIATIVES MUST BE TAKEN TO PROVIDE PUBLIC USE AREAS ON LAKE SHORES AND ADEQUATE BOATING ACCESS; LAKE USES SHOULD BE REGULATED EQUITABLY FOR RESOURCE PROTECTION AND COMPATIBILITY AMONG USERS BEFORE ACCESS IS LIMITED FOR SUCH PURPOSES.

NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

Introduction

INTRODUCTION

1.1 Overview of the Lakes Management and Protection Program

With the passage of RSA 483-A in 1990, the General Court established the New Hampshire Lakes Management and Protection Program to be administered within the Planning Unit of the Department of Environmental Services. The Program called for the creation of a Lakes Management Advisory Committee to advise the Commissioner and Lakes Coordinator in carrying out the purposes of the statute. The Lakes Coordinator is responsible for the administration of the Program.

According to the law, "it is the intent of the legislature that the New Hampshire Lakes Management and Protection Program shall complement and reinforce existing state and federal water quality laws. It is also the intent of the legislature that, through said program, the scenic beauty and recreational potential of lakes shall be maintained or enhanced, that wildlife habitat shall be protected, that opportunity for public enjoyment of lakes uses be ensured, and that littoral interests shall be respected."

Funding was necessary for the position of Lakes Coordinator and was not available until 1992 when the DES obtained a non-point pollution source grant under section 319 of the federal Clean Water Act, administered by the US Environmental Protection Agency. The Lakes Coordinator was hired in March of 1992 and, in addition to other tasks, has since been providing staff support to the Advisory Committee.

1.2 Other DES Water Quality Initiatives and the Lakes Management and Protection Program

The Department of Environmental Services is legislatively mandated with monitoring and ensuring that the water quality of the state's public waters is not degraded. Numerous programs administered by both the Water Supply and Pollution Control Division and the Water Resources Division of the Department affect lakes. Unlike the Lakes Program however, the initiatives within these divisions are primarily responsible for regulating and permitting activities which affect water quantity and quality. The Lakes Program is unique; it provides the Department the opportunity to promote responsible management of the state's water resources in a non-regulatory fashion. This goal is illustrated in the legislative charges of the Program and is further described in the policy statement of the law. According to the statute, *"New Hampshire's lakes are one of its most important natural resources; vital to wildlife, fisheries, recreation, tourism, and quality of life of its citizens. It is the policy of the state to insure the continued vitality of New Hampshire's lakes as key environmental, social, and economic assets for the benefit of present and future generations. The state shall encourage and assist in the development of management plans for the waters as well as the shoreland to conserve and protect outstanding characteristics, including recreational, aesthetic, and community significance, so that these valued characteristics shall endure as part of lake uses to be enjoyed by the citizens of New Hampshire."*

1.3 RSA 483-A and the Goals of the Lakes Management and Protection Program

RSA 483-A outlines two specific goals for the Coordinator and the Committee. First, according to 483-A:5, the law requires the Coordinator, in consultation with the Advisory Committee and with the recommendations of the relevant bureaus within DES, to prepare and submit to the legislature proposed state level management criteria for the state's lakes. Upon review and acceptance by the General Court, the Management Criteria would form the basis for state agency decisions regarding lake management and protection. *"The purpose of the criteria shall be to ensure that:*

- (a) *Water quality shall not be degraded from existing water quality standards established in RSA 485-A;*
- (b) *Potential sources of pollution, whether point or non-point sources on land or deriving from activity on the lake, shall be managed in such a way as to minimize their adverse impact on water quality. No significant adverse impact or cumulative adverse impact on water quality shall be permitted;*
- (c) *The environment for wildlife, particularly waterfowl and aquatic life, shall be maintained or improved;*
- (d) *The use of lakes and their drainage areas for flood protection and water supply shall be recognized and protected;*
- (e) *Public access shall be provided and maintained appropriate to suitable uses of the lakes; and*
- (f) *Recreation uses of lakes shall be consistent with the carrying capacity and character of each lake and shall include, but not be limited to, the use of appropriate watercraft, swimming, and fishing. Permitted uses shall provide the opportunity for the safe enjoyment of a variety of lake experiences within the state as a whole. "*

The second goal of the statute as outlined in 483-A:7, requires the Coordinator to work in consultation with the Advisory Committee and the Office of State Planning to develop detailed *Guidelines for Coordinated Lake Management and Shoreland Protection Plans* together with recommendations for implementation.

This document is the result of more than two years of work by the Committee and the Coordinator to address and fulfill the first requirement of 483-A:5 I. a-f - *Lakes Management Criteria for New Hampshire State Agencies*.

1.4 Lakes Management Advisory Committee: Meetings and Accomplishments

The Advisory Committee convened for the first time in March 1992 and has met on a monthly basis ever since. A list of past and present committee members and the agencies or interests represented is attached in Appendix B. In an effort to prepare a comprehensive *Management Criteria* document and to facilitate the development of such Criteria, many monthly meetings of the Committee were dedicated to familiarizing and updating the Committee members with issues the Criteria must address. An outline of Committee meetings and accomplishments appears in Appendix B.

1.5 Implementing the Carrying Capacity Concept; The Visitor Impact Management Process

As the Committee and Coordinator worked together, it became apparent that the Lakes Program should not be limited to the two goals outlined in the statute. In addition, the Committee agreed that 483-A:5 I.f, pertaining to the carrying capacity and the character of the state's lakes, could not and should not be addressed as part of the management criteria. The committee recognized that a dilemma lie ahead; it was charged by statute to develop management criteria without adequate information against which to design and measure management.

Carrying capacity is defined as the level or type of use beyond which impacts to the environment or visitor experience exceed acceptable levels. These levels are derived from evaluative standards which are in turn governed by specific management objectives. An assessment of the compatibility of recreation uses on public waters should include, but not be limited to, water quality, facility management, physical, ecological, biological, and social parameters that can be observed and measured. Recreational carrying capacity is not an absolute number but rather a range of values which is related to specific management objectives for a given lake, in terms of activities permitted, settings provided, and experiences sought.

Since peak recreational use of some state lakes reaches unacceptable levels, the Committee and Coordinator have treated this as a stand-alone issue, and will propose management objectives for recreational uses of lakes. Once all of the characteristics of a waterbody, both natural and human induced have been inventoried, the application of management criteria can limit impacts to acceptable levels either by setting capacities or by other management measures. The purpose of visitor impact management is to prevent unacceptable changes caused by visitor use, and to develop management strategies to keep visitor impacts within acceptable limits. Implementing this process will provide sound and equitable lake management into the next century.

One product of the committee's work regarding carrying capacity and visitor impact management, is a new course offered at the University of New Hampshire. The Lakes Coordinator and the two UNH professors who are members of the LMAC, together with other knowledgeable individuals teach the course. The research and findings of the students will be shared with the LMAC and will be incorporated into future work of the committee.

1.6 Other Goals of the Lakes Program

Other goals or elements of lake management the Committee and Coordinator felt needed attention were: 1) the ongoing role of the Lakes Coordinator to provide and exchange technical assistance among other state agencies, federal and regional agencies, and the public and private sector regarding lake management and related issues; and 2) to review the status and appropriateness of the existing lake related state statutes addressing lakes and water quality management. With the *Management Criteria* completed, the Committee and Coordinator will move forward with the issue of impact management of the state's lakes.

As a result of the nearly 30 meetings held by the Committee and Coordinator since early 1992, the Program now consists of 5 elements or goals and objectives to accomplish the same. A synopsis of these goals and objectives are included in Appendix D.

1.7 The Management Criteria - Development and Purpose

In 1984, the Office of State Planning submitted the *Lakes and Great Ponds Report* to the Council on Resources and Development (CORD). This document summarized the relevant lake related issues of the mid-1980s and offered recommendations, where appropriate, to address identified problems.

The Advisory Committee and the Coordinator thoroughly reviewed the *Lakes and Great Ponds Report* to determine if the issues were still applicable, and to assess what had been accomplished regarding the recommendations of the *Report*. Based on this review, the Coordinator and the Committee have incorporated a number of the issues and recommendations; some of the priorities for lake management in the mid 80s are still pertinent ten years later. In addition to the review of the *Lakes and Great Ponds Report*, the Committee and Coordinator analyzed current lake issues and concerns. From these efforts, a variety of recommendations have been compiled as the *Lakes Management Criteria for New Hampshire State Agencies*.

While RSA 483-A requires submission of the *Management Criteria* to the legislature for consideration and adoption, the Committee and Coordinator felt it would be appropriate to also submit this document to the Council on Resources and Development (CORD). The purpose of the *Management Criteria* is to provide state agencies with direction regarding their day to day activities

affecting lakes. The Committee believes that implementation will be more effective if the state agency administrators are part of the Criteria review process. Upon review and concurrence by CORD and upon adoption by the General Court, the Lakes Coordinator will seek and coordinate implementation of the *Management Criteria*.

While every effort was made to propose recommendations which require little or no additional fiscal commitment by the state, some recommendations cannot be implemented without an appropriation. Of the total 108 recommendations presented, 43, or less than half, will necessitate some type of financial commitment. These commitments may come in the form of additional funding to an existing department program, others may require an appropriation from the Legislature, while others may be accomplished not necessarily with funding, but via an intern work program. Of these 43 recommendations, 15 may be addressed by an intern program while 28 will be achieved with an appropriate financial commitment. The recommendations which may be completed by an intern are indicated by (F/Int.); those requiring other funding are indicated by an (F). It is hoped that the remaining recommendations can be accomplished through existing programs. Additionally, 10 recommendations should be addressed by the General Court in the form of legislation; these are indicated with an (L). Of the ten calling for legislative action, 4 were proposed as legislation in the 1996 session; others will be addressed in future legislative sessions.

1.8 Tools and Techniques to Improve Lake Management in New Hampshire

In addition to the seven components listed in the preamble, it became apparent to the Committee and Coordinator while drafting this document, that some important tools and techniques for lake management had either not been undertaken or were not being adequately dealt with by the state or other organizations. These tools and techniques are enumerated below. The Committee believes that implementation of the following will contribute to the successful realization of those items presented in the preamble.

1. The state should **compile a thorough inventory of conditions** which affect the state's lakes. In cooperation with UNH, appropriate state agencies and other organizations, DES should coordinate an effort to determine what conditions presently exist on and around all lakes across the state. This inventory shall include such items as: recreational activities and other uses, boating restrictions, land uses, watershed characteristics, water quality classifications, etc. pertaining to each individual waterbody; (F)
2. **Enforcement** of and assessment of present lake related regulations is imperative if New Hampshire's excellent lake experiences and water quality are to be maintained; (F)
3. The State should support the creation of a **watershed management plan** for all lakes in the state. The State should continue to provide technical assistance to local, regional and watershed organizations; (F)
4. **Communication and coordination** of programs, research, and activities regarding lakes, **between and among state agencies and the University of New Hampshire** is a vital linkage for sound lake management, the Lakes Coordinator should facilitate this effort;
5. The **acquisition of data**, including surveys and literature searches, and a viable **computer network** utilizing a **geographic information system** will further facilitate lakes research in the state; (F)

6. A compilation of chemical, physical and biological characteristics specific to each lake and its surrounding watershed should be conducted and presented in the form of a **lake typology**. This information is essential to determine carrying capacity, to accurately categorize a lake, and is an important component when implementing visitor impact management planning; (F)
7. The **conflicts** which arise **between departments** when implementing laws pertaining to lakes, should be **discussed and resolved** before problems are encountered;
8. **Increased state funding** is essential for the successful completion of several of the recommendations contained in the *Management Criteria* as well as other lake initiatives within the state. (F)

According to the Public Trust Doctrine and official state policy, the State is the guardian of the public waters, and is therefore responsible for protecting and maintaining the integrity of its lakes for all residents and visitors. This document is an effort by the state to assess the activities of its agencies and departments and to recommend at a statewide and agency specific level, where improvements or changes can be made and to provide a mechanism to facilitate action. The proposed implementation schedule for the *Management Criteria* is included in Appendix C.

The implementation of these recommendations will not occur overnight. The State's commitment to these efforts, orchestrated by the Lakes Coordinator must be ongoing for the next three to five years. To facilitate execution of the recommendations, the Lakes Coordinator will work directly with each of the committee members representing the 6 state agencies. After five years, or in 2000, the *Management Criteria* should be reviewed and modified accordingly so the emerging lake issues of the 21st century are confronted and addressed.

NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

Lakes Management Criteria for New Hampshire State Agencies

483-A:5 I.a.: Water quality shall not be degraded from existing water quality standards established in RSA 485-A.

Findings: Statewide	Recommendations: Statewide
1.0 The state of New Hampshire has not clarified the regulatory role of the Wetlands Board regarding preservation of the public trust and minimization of environmental impacts to the state's waterbodies.	1.1 The General Court should promulgate legislation to address this issue and thereby set forth a policy for the Wetlands Board. (L)
2.0 Historically, state agencies have not been as responsible as necessary to protect water quality when working in or adjacent to the state's public waters.	<p>2.1 All public agencies, and their contractors should implement "best management practices" when constructing and maintaining public facilities, roads and other capital improvements, or when conducting other activities, which may affect a lake or pond.</p> <p>2.2 DES should continue to provide, and other public agencies should participate in, educational and training programs which address the impacts of land development activities upon water quality. (F)</p>
3.0 Existing NH surface water quality regulations prepared by DES are based largely on bacteriological, physical and chemical parameters.	3.1 In cooperation with UNH and appropriate agencies, DES should develop and implement additional parameters based on biocriteria to augment existing water quality standards.
4.0 The DES Boat Inspection Program is a part time effort by the department and is therefore limited to summer weekends on Lake Winnepesaukee.	4.1 Since boats with onboard sanitation devices are now on numerous lakes throughout the state, the State should support the expansion and funding of this program and explore other alternatives. (F)
5.0 To expedite the wetlands permitting process for the public, the present NH Wetlands Board permitting process needs to be revised and streamlined.	5.1 The Wetlands Board and Bureau should analyze its application review and permitting process to determine where staff resources could be most efficiently utilized.
6.0 With the passage and partial funding of the Shoreland Protection Act, the legislature reaffirmed its commitment to protect the water quality of the state's public waters. While two positions were called for in the Act's Implementation Plan, only one position was funded.	<p>6.1 As part of the Education Program of the Shoreland Protection Act, DES should notify and include all state agencies in the rulemaking process; should notify all state agencies of their specific responsibilities under the Act; and should provide assistance to state agencies performing work in the protected shoreland.</p> <p>6.2 The State should encourage municipalities to adopt and implement the minimum standards of the Shoreland Protection Act.</p>

483-A:5 I.a.: Water quality shall not be degraded from existing water quality standards established in RSA 485-A.

Findings: Statewide	Recommendations: Statewide
	<p>6.3 The State should consider funding the second, or compliance position, for the Act. (F)</p> <p>6.4 All appropriate public agencies should continue to provide technical assistance to the private sector and property owner regarding construction and landscaping practices on shorefront properties. (F)</p>
<p>7.0 Phosphorus is the limiting nutrient for plant growth in the state's lakes. Human contributions of phosphorus to New Hampshire lake's should be eliminated or significantly reduced, wherever possible.</p>	<p>7.1 All State agencies should purchase and use phosphate free soap.</p> <p>7.2 The legislature should amend RSA 485-A:55 & 56 to include a phosphate ban for automatic dish detergents. (L)</p> <p>7.3 The Shoreland Protection Act should be amended to prohibit the application of phosphate fertilizers on commercial properties within the protected shoreland. (L)</p>
<p>8.0 New Hampshire has two of the nations' leading citizen lake water quality monitoring programs, the Volunteer Lake Assessment Program (VLAP) administered through DES, and the Lay Lakes Monitoring Program (LLMP) administered through UNH.</p>	<p>8.1 DES and UNH should continue to encourage the expansion of volunteer monitoring programs and should provide consistent standards and guidance for these programs.</p> <p>8.2 The State should financially support the efforts of the DES and UNH volunteer monitoring programs. (F)</p>
<p>9.0 Acid precipitation continues to threaten the quality of the state's lakes. Some lakes have little acid neutralizing capacity (ANC), and that buffering capacity continues to decline.</p>	<p>9.1 State and federal legislators should continue to advance legislation and otherwise exert influence to curb the introduction of acid rain producing pollutants. (L)</p> <p>9.2 DES, UNH and other appropriate organizations should continue to investigate the effects of acid rain on the state's waterbodies and should jointly issue a periodic report of findings. (F/Int.)</p>
<p>10.0 A number of state agencies and UNH are collecting water quality data for all waterbodies.</p>	<p>10.1 While all of these agencies should maintain their existing unique databases, where the data are compatible, they should be archived at a principal location and maintained by an appropriate agency. (F/Int.)</p>

483-A:5 I.a.: Water quality shall not be degraded from existing water quality standards established in RSA 485-A.

Findings: Agency Specific	Recommendations: Agency Specific
Department of Environmental Services:	
1.0 Of the approximately 800 lakes and great ponds in the state, the DES Lakes Survey Program has, on at least one occasion, sampled and classified the water quality for 650 waterbodies or 99% of the total surface water area of the state.	1.1 DES should continue its water quality monitoring efforts so all public waters are sampled frequently enough to establish a baseline and to identify trends in water quality.
2.0 Nutrients and/or pollutants from the watershed may enter a lake via its tributaries.	2.1 The department's lakes and rivers monitoring programs should be better coordinated to ensure that monitoring of lake tributaries is conducted.
3.0 The effect of fluctuating water levels upon water quality, shoreline integrity, and aquatic life has not been determined.	3.1 DES working in cooperation with UNH and Fish and Game should investigate and jointly issue a report outlining the effects of fluctuating water levels. (F/Int.)
4.0 The impacts to water quality resulting from vehicles operating on or falling through the ice has not been determined.	4.1 DES working in cooperation with UNH, Fish and Game and Department of Safety should investigate and jointly issue a report outlining the effects of vehicles operating on and falling through the ice. (F/Int.)
5.0 Limited staff resources affects the department's ability to respond in a timely manner to water quality complaints.	<p>5.1 DES should continue its ongoing in-house efforts to cross train staff to address multiple water quality issues.</p> <p>5.2 DES should continue to offer training in water quality monitoring to other state agencies. (F)</p> <p>5.3 DES should continue to foster lakeshore and tributary sanitary surveys and provide technical assistance to organizations for such efforts. (F)</p>
Fish and Game Department:	
1.0 Historically, Conservation Officers did issue cease and desist orders in the field.	1.1 Conservation Officers should provide the Department of Environmental Services with water quality violations by notifying DES when problems are observed.
2.0 The department issues approximately 425 permits for fishing tournaments each year; some of these tournaments occur on the same day and at the same location.	2.1 The department should continue to support its team of constituents and partners working on guidelines for fishing tournaments; problems to be addressed include: parking, police, toilets, trash, and other items.
3.0 Increased boating traffic and the continuous launching of boats such as at a fishing tournament may create significant wave action and turbidity at the launch site.	3.1 Fish and Game should continue to perform occasional inspections during tournaments to determine if boating traffic is impacting the shoreline integrity in the immediate area.

483-A:5 I.a.: Water quality shall not be degraded from existing water quality standards established in RSA 485-A.

Findings: Agency Specific	Recommendations: Agency Specific
Department of Safety	
1.0 Rafting (the grouping of 2 or more boats together on the water) is becoming more popular with the public; this activity may be contributing to deteriorating water quality on portions of the state's lakes.	1.1 The Department of Safety should notify DES prior to all public hearings regarding rafting.
2.0 The DES Boat Inspection Program is a part time effort by the department and is therefore limited to summer weekends on Lake Winnepesaukee.	2.1 A Memorandum of Agreement (MOA) should be drawn up between the Department of Environmental Services and the Department of Safety, authorizing Marine Patrol to participate in the DES Boat Inspection Program. 2.2 Upon approval of the MOA, the Marine Patrol should work in cooperation with DES to expand the Boat Inspection Program. The Marine Patrol could conduct inspections on summer weekdays on lakes other than Winnepesaukee. (F)
Office of State Planning	
1.0 Provides technical assistance to towns pertaining to the implementation of shoreland protection provisions in local ordinances.	1.1 OSP should continue to provide technical assistance to municipalities and should continue to work cooperatively with DES toward the educational efforts of the Shoreland Protection Program.
Department of Resources and Economic Development	
1.0 The department is responsible for the creation and maintenance of beaches at state parks.	1.1 The department should require park managers to obtain a Wetlands Board permit before placing sand on a state beach.
Department of Agriculture	
1.0 The department provides technical assistance to the agricultural community regarding compliance with the state's water quality statutes and rules.	1.1 To provide the department ample time to review and determine the potential impact of these rules to the agricultural community, DES should notify the department when a water policy or rule is introduced for adoption.
2.0 It is often difficult for the agricultural community to obtain information regarding state water quality and quantity rules, since these rules are administered through different state agencies.	2.1 In cooperation with DES, the department should develop a "one stop" information gathering medium regarding these rules as they affect agricultural operations. (F/Int.)
Department of Transportation:	No recommendations

483-A:5 I.b.: Potential sources of pollution, whether point or non-point sources on the land or deriving from activity on the lake, shall be managed in such a way as to minimize their adverse impact on water quality. No significant adverse impact or cumulative adverse impact on water quality shall be permitted.

Findings: Statewide	Recommendations: Statewide
1.0 Cumulative impacts from individual development activities in a watershed and the subsequent effect that development may have upon a waterbody, are not sufficiently addressed in existing state regulations.	<p>1.1 A review of applicable state laws should be conducted by DES, OSP, and other appropriate agencies and organizations. Revisions to existing state laws or new laws to address cumulative impacts should be developed.</p> <p>1.2 The Legislature should consider the revisions proposed by the agencies and should amend state laws to address cumulative impacts. (L)</p>
2.0 Construction and soil disturbing activities too often result in excessive sediment and erosion control problems affecting lakes.	2.1 All state agencies and their contractors should implement best management practices when conducting soil disturbing activities.
3.0 Road salting activities by state and local governments contribute to the degradation of waterbodies.	<p>3.1 The NH Municipal Association should continue to publicize the Municipal Immunity Law, RSA 231:92 IV, so municipalities could establish no or low salt zones near lakes and ponds.</p> <p>3.2 DOT, in cooperation with other appropriate state agencies and organizations should assess the impacts of road salt on water quality. (F)</p>
4.0 The proper storage and maintenance of road salt by state and local agencies is not always implemented.	4.1 All appropriate public agencies should provide better educational and technical assistance to municipalities regarding the proper siting and maintenance of salt piles.
5.0 Snow is sometimes disposed directly into surface waters.	5.1 All appropriate state agencies should continue to provide educational and technical assistance to municipalities and to private companies regarding proper snow disposal.
6.0 Jurisdiction of, responsibility for, and regulatory enforcement of some on-ice activities is unclear.	6.1 The General Court should propose legislation to define such jurisdiction and responsibilities. (L)
7.0 Existing DES Administrative Rules require toilet facilities at public beaches. Some beaches do not have proper toilet facilities.	7.1 DES and Health and Human Services should review its beach inspection reports and should notify the proper authority that toilet facilities must be provided. (F)
8.0 Numerous state agencies own and/or manage forests, parks and other lands across the state.	8.1 All state agencies should inventory their lands to determine pollution sources affecting surface waters. If problems are identified, DES should be contacted for assistance. (F/Int.)
9.0 Numerous state agencies are developing Best Management Practices (BMP) manuals.	9.1 As an agency develops a manual, it shall seek input from all other appropriate agencies.

483-A:5 I.b.: Potential sources of pollution, whether point or non-point sources on the land or deriving from activity on the lake, shall be managed in such a way as to minimize their adverse impact on water quality. No significant adverse impact or cumulative adverse impact on water quality shall be permitted.

Findings: Agency Specific	Recommendations: Agency Specific
Department of Environmental Services:	
1.0 The department is responsible for identifying and providing technical assistance to correct sources of point and non-point pollution.	1.1 The department should continue to monitor its various programs to ensure that appropriate additions to the staff are made as necessary. (F)
2.0 The department has developed a watershed approach to solve point and non-point pollution sources in surface waters.	2.1 The department should be sure to solicit input from local advisory committees when developing watershed plans.
3.0 Phosphorus is the limiting nutrient for plant growth in the state's lakes. Human contributions of phosphorus to the state's lakes should be eliminated or significantly reduced, wherever possible.	3.1 In cooperation with the scientific community and other appropriate organizations, should conduct and publish a study of findings regarding phosphorus contributions to waterbodies from septic systems. (F/Int.)
4.0 Historically, many lake shorelines were subdivided into undersized lots and developed with inadequate septic systems; many of these septic systems are still in existence. Older septic systems may be contributing to the degradation of surface waters.	<p>4.1 In cooperation with the scientific community and other appropriate organizations, should review the Waterfront Property Sale; Site Assessment Study Law (RSA 485-A:39) and recommend that it be amended to require the replacement of a septic system which is not adequately treating waste, when ownership of a property is being transferred. (L)</p> <p>4.2 The department should continue its policy of encouraging new and innovative technology for onsite septic systems.</p>
5.0 Due to the nature and extent of some wetland violations and upon field verification by a qualified individual, the violation should be stopped immediately.	5.1 Consistent with other DES Bureaus, the Wetlands Bureau should be granted cease and desist authority.
6.0 Some of the activities permitted under the Wetlands Board's Rules may result in the degradation of water quality. For example, the impacts of sand dumping for beach creation and maintenance have not been thoroughly researched.	6.1 The Wetlands Board should study permitted activities to determine which may cause degradation, and should modify their Administrative Rules where appropriate (F/Int.)
7.0 The department has developed a best management practices (BMP) guide for marinas, yacht clubs and other public multiple docking facilities.	7.1 DES should offer an educational program to all operators of marinas, yacht clubs and public multiple docking facilities to convey these recommended practices. (F)

483-A:5 I.b.: Potential sources of pollution, whether point or non-point sources on the land or deriving from activity on the lake, shall be managed in such a way as to minimize their adverse impact on water quality. No significant adverse impact or cumulative adverse impact on water quality shall be permitted.

Findings: Agency Specific	Recommendations: Agency Specific
Department of Transportation:	
1.0 The degree of surface water quality degradation resulting from road salting is unknown.	<p>1.1 In accordance with the Municipal Immunity Law (RSA 231:92 IV), DOT should work with towns to establish a road maintenance program for low or no salt zones around lakes. DOT should also limit salt applications in such specified areas.</p> <p>1.2 Should publicize federal programs, such as ISTEA (Intermodal Surface Transportation Efficiency Act) as sources of grant money for municipalities to address salt and erosion on roads and bridges adjacent to lakes.</p> <p>1.3 Should continue research into alternative de-icing practices, and should ensure that water quality impacts of these alternatives are addressed in the studies. (F)</p> <p>1.4 DOT should more closely monitor its regional garages to ensure that salt storage piles do not impact water quality.</p>
2.0 Poorly supervised road construction and maintenance activities have caused erosion allowing sediment and other contaminants to enter surface waters.	2.1 Should continue to have appropriate personnel participate in training for "best management practices" for sediment and erosion control. (F)
3.0 Stormwater drainage from roads is often designed to discharge directly into waterbodies. Without proper treatment, this runoff may degrade water quality.	<p>3.1 The department and its contractors should design roads to direct stormwater drainage into a treatment or detention device prior to discharge into a waterbody.</p> <p>3.2 All appropriate agencies should continue to provide educational and technical assistance to towns and private contractors regarding the design of stormwater drainage from roads. (F)</p>
Department of Agriculture:	
1.0 The department issues permits for pesticides and herbicides adjacent to and in the state's surface waters. The application of herbicides and pesticides in or adjacent to lakes may degrade water quality.	<p>1.1 Should pursue funds for a general public education program regarding pesticide use. (F)</p> <p>1.2 In cooperation with DES and UNH Coop. Ext., should evaluate the effects of herbicides and pesticides, and should jointly issue a report of findings. (F/Int.)</p>

483-A:5 I.b.: Potential sources of pollution, whether point or non-point sources on the land or deriving from activity on the lake, shall be managed in such a way as to minimize their adverse impact on water quality. No significant adverse impact or cumulative adverse impact on water quality shall be permitted.

Findings: Agency Specific	Recommendations: Agency Specific
Department of Agriculture: continued	
2.0 The application of some in-lake herbicides and pesticides may pose a threat to public health and the aquatic environment.	2.1 The use of in-lake herbicides and pesticides should be limited to those with a low ecological profile (bio-controls).
3.0 Fertilizers sold in New Hampshire are permitted through the department. Retailers selling these products are not always aware of the content and use of these fertilizer products.	3.1 In cooperation with DES and UNH Cooperative Extension, should provide an education program for retailers regarding the impacts of fertilizers on lakes. (F)
4.0 Best management practices (BMPs) for proper management of manure are published by the department. Workshops are held to educate the public and manure applicators on the implementation of these BMPs.	4.1 Should continue a public education effort regarding manure application, storage and disposal. (F)
Department of Safety:	
1.0 The department is responsible for permitting boat races. These activities may impact a lake or an area of a lake.	1.1 Prior to the issuance of any boat racing permits, the department should check with the DES Biology Bureau and Shoreland Protection Program to determine the impacts to water quality and shorelands which should be minimized or prevented.
Office of State Planning:	
1.0 The Office is responsible for providing assistance to municipalities regarding zoning and other land use regulations.	1.1 In cooperation with DES, the Office should develop and distribute recommended requirements, for local adoption, which would reduce pollution.
Other Departments:	No recommendations

483-A:5 I.c.: The environment for wildlife, particularly waterfowl and aquatic life, shall be maintained or improved.

Findings: Statewide	Recommendations: Statewide
1.0 Better communication is necessary among all agencies and organizations relative to wildlife issues, and to ensure that species biodiversity is being addressed.	<p>1.1 All lake-related agencies and organizations, both public and private, in cooperation with UNH should continue their efforts to inventory, collect, and monitor data pertaining to fish and wildlife. (F/Int.)</p> <p>1.2 All appropriate state agencies, the New Hampshire Lakes Association and other private non-profit organizations should work cooperatively to provide and participate in forums for the exchange of educational information regarding fish, wildlife and habitats pertaining to lakes. An example of such an effort is the Fish and Game Aquatic Education Program.</p>
2.0 Historically, lake shorelines have been altered to accommodate development.	<p>2.1 In cooperation with public and private organizations, the State should pursue an aggressive program to preserve shoreline habitat for the protection of all wildlife species. (F)</p> <p>2.2 Members of the Natural Areas Council should continue to work with private lakeshore owners and towns toward proper management, and shall educate the public about the value of natural areas and littoral buffer corridors.</p> <p>2.3 State agencies, municipalities, lake associations, and wildlife organizations (e.g. Loon Preservation Committee) should provide shoreline habitat data to the Wetlands Board for use in regulatory decisions. (F/Int.)</p>
3.0 Permanently protected shoreland areas, commonly secured by fee acquisition or conservation easements, are needed to sustain wildlife, natural vegetation, wetland habitats and scenic vistas.	3.1 The state should provide continuing funding for land acquisition through land purchase bonds, dedicated funds, private contributions, and legislative appropriations to purchase fee or less-than-fee interest in shorelands. (L,F)

483-A:5 I.c.: The environment for wildlife, particularly waterfowl and aquatic life, shall be maintained or improved.

Findings: Statewide	Recommendations: Statewide
4.0 A multi-agency approach is imperative for the identification, monitoring and control of nuisance species, such as milfoil and zebra mussels.	<p>4.1 DES, Fish and Game, UNH Cooperative Extension and all other appropriate agencies and organizations should continue to provide public education and to exchange information and resources regarding nuisance species.</p> <p>4.2 The above agencies should prepare and submit to the NH General Court, a report regarding the present and potential impact of milfoil and zebra mussels.</p>
5.0 Existing dams create impoundments which benefit wildlife by preserving aquatic environments. Private owners may not have the resources to maintain these structures.	5.1 The State should selectively acquire dams and flowage rights to protect wildlife habitat when determined to be in the public interest. (L)
Findings: Agency Specific	Recommendations: Agency Specific
Departments of Resources and Economic Development and Fish and Game:	
1.0 The department is responsible for the administration of the New Hampshire Natural Heritage Inventory for flora; the Fish and Game Department is responsible for the administration of a similar program for fauna.	1.1 In cooperation with all state agencies, non-profit organizations, lake associations, and interested citizens a multi-media approach should be formulated and instituted to identify and recommend water-related sites or locations for the protection of rare, threatened and endangered species. The Departments of Resources and Economic Development and Fish and Game will be the catalysts of this program. (F)
Fish and Game Department:	
1.0 The department is responsible for the management and enforcement of laws pertaining to wildlife.	1.1 Additional staff resources are necessary to achieve greater compliance with wildlife laws. (F)

483-A:5 I.c.: *The environment for wildlife, particularly waterfowl and aquatic life, shall be maintained and improved.*

<i>Findings: Agency Specific</i>	<i>Recommendations: Agency Specific</i>
Fish and Game Department: continued	
2.0 The department is responsible for managing fish and wildlife resources of the state.	<p>2.1 The department should continue to foster communication among agencies relative to wildlife issues, using CORD and UNH Cooperative Extension to help facilitate this effort.</p> <p>2.2 The department should offer technical assistance to lakeshore residents to help them determine if they own wildlife habitat, and advise them regarding habitat management. (F)</p> <p>2.3 The department should establish a methodology to inventory wildlife corridors connected to lakeshore areas for management and propagation of wildlife and game species.</p>
3.0 The department is responsible for monitoring bait species brought into the state from outside sources.	3.1 The department should continue to work in cooperation with DES and UNH Cooperative Extension regarding the monitoring and potential controls of zebra mussels which may be brought into the state with bait water. (F)
Other Departments:	No recommendations

483-A:5 I.d.i.: The use of lakes and their drainage areas for flood protection shall be recognized and protected.

483-A:5 I.d.ii.: The use of lakes as public drinking water supplies shall be recognized and protected.

483-A:5 I.d.iii.: The flowage rights on lakes shall be recognized and protected.

Findings: Statewide	Recommendations: Statewide
1.0 The State, a private individual or organization, or a corporation may maintain the flowage rights to a waterbody and is therefore responsible for the water level management of the waterbody.	1.1 All entities responsible for water level management on the state's lakes should make every reasonable effort to minimize destructive flooding of lakeshore and downstream properties.
2.0 Some public drinking water supplies with existing recreational use restrictions are not presently available for public access. Legislation is often proposed which would open some of these public drinking water supplies to recreational use.	2.1 If such legislation becomes effective, and if a department proposed a public access facility on a public drinking water supply, then prior to approval, the proposal should undergo an additional review by the regulator and DES to ensure that water quality and existing watershed regulations are not compromised.
3.0 The State presently requires the registration of the average daily use of 20,000 gallons per day (GPD) from surface or groundwater sources during any week of the year, on a continuing basis.	3.1 The state should consider whether water withdrawals should be regulated.
4.0 The State should continue to recommend against the use of untreated surface water for human consumption.	4.1 The state should consider additional education/outreach methods to protect the public.
5.0 If deemed to be a public water supply, the purveyor is legally responsible for providing water of the quality required by the federal and state Safe Drinking Water Acts.	
6.0 Some water supplies use phosphate-based compounds to line pipes and reduce corrosion. Where these systems discharge to a lake, the phosphorus may contribute to lake eutrophication.	6.1 Under the direction of DES, an investigation into which systems use phosphate compounds and where the systems discharge, is warranted. (F/Int.)
7.0 There is a need for additional scientific documentation and greater uniformity of standards upon which restrictions on water supplies are determined.	7.1 The General Court should direct DES to require that all restrictions placed on water supply surface waters be based on scientific documentation and/or standards. (F) (L)

- 483-A:5 I.d.i.: The use of lakes and their drainage areas for flood protection shall be recognized and protected.**
- 483-A:5 I.d.ii.: The use of lakes as public drinking water supplies shall be recognized and protected.**
- 483-A:5 I.d.iii.: The flowage rights on lakes shall be recognized and protected.**

Findings: Agency Specific	Recommendations: Agency Specific
Department of Environmental Services:	
1.0 On occasion, individuals and/or organizations report that they did not receive adequate notice of a proposed water level drawdown, and therefore did not have an opportunity to comment on the proposed change.	<p>1.1 The department should review its notification process to ensure that all state agencies and municipalities are given proper notice and adequate time to respond to a proposed change in water level or volume or an emergency situation.</p> <p>1.2 The department should determine what if any impact a substantive change in water volume may have upon the water quality of a lake. (F/Int.)</p>
2.0 The watershed approach to water supply management permits the water supply provider to promulgate restrictions across municipal boundaries.	2.1 The General Court should promulgate legislation to address this issue. (L)
3.0 The exercise of flowage rights may conflict with other uses of the waterbody, such as water supply needs and wildlife habitat management.	<p>3.1 The department, other appropriate agencies and interested parties should seek informal resolution of issues through an inclusive process of education and dialogue.</p> <p>3.2 The Water Resources Division should continue to investigate lake level management in the public interest when petitioned by property owners or elected officials to address conflicts arising from the exercise of flowage rights and order changes to the operation, if warranted.</p>
Other Departments:	No recommendations

483-A:5 I.e.: Public access shall be provided and maintained appropriate to suitable uses of the lakes.

Findings: Statewide	Recommendations: Statewide
1.0 The Lakes Management Advisory Committee supports the "Recommendations" of the <i>Public Access Plan</i> , prepared by the Office of State Planning and published in November 1991.	1.1 The recommendations of the <i>Public Access Plan</i> should be implemented to provide adequate access for appropriate recreational uses.
2.0 Since information pertaining to public access and water use opportunities throughout the state is insufficient, the Lakes Management Advisory Committee supports the current efforts of the Office of State Planning to inventory all existing access sites on the state's waterbodies and watercourses.	2.1 This information should be disseminated as soon as it becomes available and to as many people as possible.
3.0 The Lakes Management Advisory Committee supports the state's cooperative efforts for statewide public access.	<p>3.1 The uses of lakes and their resulting impacts should be regulated for resource protection and compatibility among users before public access is limited for such purposes.</p> <p>3.2 When developing a public access site, the responsible agencies should take into account both the character of the lake, and the present and potential user impact to that lake. This information shall be factored into the design and layout of the public access site. (F)</p> <p>3.3 Before rehabilitating or expanding an existing public access, or developing a new public access site on a waterbody, the responsible agency should consider the number, kind and distribution of public and private access sites on that lake and other lakes in the immediate area. (F)</p>
Findings: Agency Specific	Recommendations: Agency Specific
Fish and Game Department:	
1.0 The General Court often considers legislation which would grant the department's Statewide Public Boat Access Program the authority to construct public access facilities on public drinking water supplies. The regulators of these supplies may have been granted avoidance of filtration requirements by DES because "controlling activities" have been implemented.	1.1 If such legislation becomes effective, and if the department proposes a public access facility on a public drinking water supply, then prior to approval, the proposal should undergo an additional review by the regulator and DES to ensure that water quality and existing watershed regulations are not compromised.
Other Departments:	No recommendations

483-A:5 I.f: Recreation uses of lakes shall be consistent with the carrying capacity and character of each lake and shall include, but not be limited to, the use of appropriate watercraft, swimming, and fishing. Permitted uses shall provide the opportunity for the safe enjoyment of a variety of lake experiences within the state as a whole.

<i>Findings: Statewide</i>	<i>Recommendations: Statewide</i>
1.0 The "carrying capacity" of New Hampshire's lakes has not been determined. These capacities must be ascertained prior to the implementation of appropriate management objectives. Carrying capacity is an elusive concept. The capacities of New Hampshire's lakes to support recreational users will be seen differently by different constituencies.	1.1 It is in the best interest of the state to have the Lakes Coordinator, working in cooperation with the Lakes Management Advisory Committee determine present and potential recreational use impacts, and to recommend appropriate management objectives for the state's waterbodies. (F/Int.) 1.2 Managers must seek consensus on recreational uses, including but not limited to, the use of appropriate watercraft, swimming, and fishing, and should apply appropriate management objectives to achieve this.
2.0 Permanently secured shoreland areas, commonly obtained by fee acquisition or conservation easements, are needed to provide recreational access and recreational opportunities on the state's lakes.	2.1 The state should provide continuing funding for land acquisition through land purchase bonds, dedicated funds, private contributions, and legislative appropriations to purchase fee or less-than-fee interest in shorelands for recreational purposes. (F)

483-A:5 I.f: Recreation uses of lakes shall be consistent with the carrying capacity and character of each lake and shall include, but not be limited to, the use of appropriate watercraft, swimming, and fishing. Permitted uses shall provide the opportunity for the safe enjoyment of a variety of lake experiences within the state as a whole.

Findings: Agency Specific	Recommendations: Agency Specific
Department of Environmental Services:	
1.0 According to RSA 483-A 1.5., the department is responsible for determining that recreational uses of lakes are compatible with the character of each lake. The State has no process to manage present and potential recreational use impacts to a waterbody.	1.1 The State should provide funding to DES to study and implement a method and process which would assess recreational uses and their impacts to the character and quality of each lake. (F)
Department of Safety:	
1.0 There is an insufficient number of Marine Patrol Officers to enforce existing regulations on the state's waterbodies. State funding has declined from \$1.2 million dollars in 1990 to \$795,000 in 1994.	1.1 The State should increase funding to the Marine Patrol. (F) 1.2 The State should ensure that funding dedicated to boating regulation is directed to the Department of Safety for the Marine Patrol.
2.0 Fixed rafts and floats are occasionally being used by shoreowners to limit others' use of public waters, by extending their private property boundaries and occupying a portion of those public waters.	2.1 In cooperation with DES Wetlands Bureau, should determine the impact of rafts and/or floats upon the use of public waters. (F/int) 2.2 In cooperation with the DES Lakes Management and Protection Program, should launch a public education effort informing the public that rafts or floats can not be used to limit the public's use of public waters.
Other Departments:	No recommendations

APPENDIX A

NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

Chapter 483-A

CHAPTER 483-A

NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

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CHAPTER 118

STATE OF NEW HAMPSHIRE
In the year of Our Lord one thousand
nine hundred and ninety

AN ACT

establishing a lakes management and protection program.

Be it Enacted by the Senate and House of
Representatives in General Court convened:

118:1 New Subparagraph: Duty Added. Amend RSA 4-C:1, II (I) to read as follows:

(I) *Participate and advise in matters of land use planning regarding lakes and rivers management programs.*

(j) Perform such duties as may assign.

118:2 New Chapter: New Hampshire Lakes Management and Protection Program.

Amend RSA by inserting after chapter 483 the following new chapter:

CHAPTER 483-A NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

483-A:1 Statement of Policy. New Hampshire's lakes are one of its most important natural resources; vital to wildlife, fisheries, recreation, tourism, and the quality of life of its citizens. It is the policy of the state to insure the continued vitality of New Hampshire lakes as key environmental, social, and economic assets for the benefit of present and future generations. The state shall encourage and assist in the development of management plans for the waters as well as the shoreland to conserve and protect outstanding characteristics, including recreational, aesthetic, and community significance, so that these valued characteristics shall endure as part of lake uses to be enjoyed by the citizens of New Hampshire.

483-A:2 Definitions. In this chapter:

I. "Commissioner" means the commissioner, department of environmental services.

II. "Advisory Committee" means the lakes management advisory committee established in RSA

483-A:6

III. "Lake" means the bodies of fresh water as defined in RSA 271:20.

483-A:3 Program Established; Intent. There is established the New Hampshire lakes

management and protection program within the department of environmental services. It is the intent of the legislature that the New Hampshire lakes management and protection program shall compliment and reinforce existing state and federal water quality laws. It is also the intent of the legislature that, through said program, the scenic beauty and recreational potential of lakes shall be maintained or enhanced, that wildlife shall be protected, that opportunity for public enjoyment of lake uses be ensured, and that littoral interests shall be respected.

483-A:4 Lakes Coordinator. There shall be established in the office of the commissioner, department of environmental services, a state lakes coordinator, who shall be a classified employee qualified by reason of education and experience, and who shall administer the New Hampshire lakes management and protection program.

483-A:5 Management:

1. The lakes coordinator, in consultation with the advisory committee, and upon consideration of recommendations from each of the relevant divisions and bureaus within the department of environmental services, shall prepare and submit to the legislature for consideration proposed state level management criteria to be provided for the state's lakes. The management criteria upon adoption shall provide the basis for state agency decisions regarding lakes management and protection. The purpose of such criteria shall be to ensure that:

(a) Water quality shall not be degraded from existing water quality standards established in RSA 485-A.

(b) Potential sources of pollution, whether point or non-point sources on the land or deriving from activity on the lake, shall be managed in such a way as to minimize their adverse impact on water quality. No significant adverse impact or cumulative adverse impact on water quality shall be permitted.

(c) The environment for wildlife, particularly waterfowl and aquatic life, shall be maintained or improved.

(d) The uses of lakes and their drainage areas for flood protection and water supply shall be recognized and protected.

(e) Public access shall be provided and maintained appropriate to suitable uses of the lakes.

(f) Recreation uses of lakes shall be consistent with the carrying capacity and character of each lake and shall include, but not be limited to, the use of appropriate watercraft, swimming, and fishing. Permitted uses shall provide opportunity for the safe enjoyment of a variety of lake experiences within the state as a whole.

II. No state-owned property adjacent to or providing access to a lake shall be disposed of by the state except upon the review and recommendations of the advisory committee.

483-A:6 Lakes Management Committee; Establishment.

I. There is established a lakes management advisory committee.

II. The advisory committee shall include the following members to be appointed by the governor and council:

(a) A member representing a New Hampshire lake association nominated by the New Hampshire Lakes Foundation.

(b) A member representing the state conservation committee established in RSA 432:10.

(c) A member of the fish and game commission.

(d) An elected municipal officer of a lakefront community nominated by the New Hampshire Municipal Association.

(e) A member of a conservation commission from a lakefront community nominated by the New Hampshire Association of Conservation Commissions.

(f) A member representing the scientific community from the University of New Hampshire.

(g) A member representing the tourism industry nominated by the New Hampshire Travel Council.

(h) A representative of the conservation community chosen from a list of 3 nominees submitted by the Society for the Protection of New Hampshire Forests, the Audubon Society, and the New Hampshire Wildlife Federation.

(i) A member representing the Marine Dealers Association.

(j) A member of the New Hampshire Association of Realtors.

(k) A member of a planning board appointed by the New Hampshire Municipal Association.

(l) A member representing the Business and Industry Association of New Hampshire.

III. The director of the office of state planning, the executive director of the fish and game department, the commissioner of resources and economic development, the commissioner of the department of safety, the commissioner of the department of agriculture, and the commissioner of the department of transportation, or their designees, shall serve as nonvoting members of the committee.

IV. The terms of state agency members shall be the same as their terms in office. Voting members shall serve 3-year terms, provided, however, that for the initial appointment, persons appointed under subparagraphs:

- (a) (a) through (d) shall be appointed for one year.
- (b) (e) through (h) shall be appointed for two year; and
- (c) (i) through (l) shall be appointed for three years.

V. The commissioner shall convene the first meeting no later than September 1, 1990. The committee shall elect a chairperson and vice-chairperson, who shall serve for 3-year terms. Subsequent meetings shall be at the call of the chair, or at the request of 3 or more committee members. The lakes coordinator referred to in RSA 483-A:4 shall serve as secretary and staff to the committee.

VI. The advisory committee shall advise the commissioner and lakes coordinator in carrying out the purpose of this chapter.

483-A:7 Lakes Management and Protection Plans.

I. The lakes coordinator, in consultation with the advisory committee and with the cooperation and assistance of the office of state planning, shall develop detailed guidelines for coordinated lake management and shoreland protection plans together with recommendations for implementation. Upon acceptance of the guidelines by the advisory committee, the lakes coordinator and members of the advisory committee shall hold public hearings regarding the guidelines. At least one hearing shall be held in each counselor district.

II. The lakes coordinator and the office of state planning, with the help of appropriate council on resources and development agencies, shall provide technical assistance and, within the limits of legislative appropriations, award financial grants to regional planning commissions established under RSA 36:45-53 in support of lake management and shoreland protection planning. The commissioner, with the advice of the lakes coordinator and the advisory committee, shall adopt rules, pursuant to RSA 541-A, relative to awarding financial grants under this paragraph.

III. The lakes coordinator and the office of state planning, in cooperation with regional planning agencies, and appropriate council on resources and development agencies, shall provide technical assistance and information in support of lake management and local shoreland planning efforts consistent with the guidelines established under RSA 483-A:7, I and compatible with the criteria established under RSA 483-A:5.

IV. Whenever more than one municipality borders a lake, all such municipalities shall be encouraged to cooperate in the development of a coordinated lake management and shoreland protection plan.

V. Lake and shoreland management plans developed pursuant to paragraphs I, II, and III shall address, but not be limited to, the following:

- (a) Permitted recreational uses and activities.
- (b) Permitted non-recreational uses and activities.
- (c) Existing and future land uses.
- (d) Protection of wetlands, wildlife, fish habitats, and other significant natural areas.
- (e) Dams, bridges, and other water structures.
- (f) Public access by foot and vehicle.
- (g) Setback and other location requirements.
- (h) Dredging, filling, mining, and earth moving.
- (i) Prohibited uses.
- (j) Factors controlling water levels and flowage rights.
- (k) Facilities appropriate to support approved lake uses.
- (l) Water safety.
- (m) Other factors affecting water quality.

483-A:8 Acceptance and Expenditures of Funds.

I. The commissioner may apply for and accept, from any source, gifts; donations of money; grants; federal, local, private, and other funds and incentives; and interests in land for the purpose of this chapter.

II. The lakes coordinator, with the approval of the commissioner, may expend any funds received under paragraph I for the purpose of this chapter, and such funds are hereby continually appropriated.

483-A:9 State Agency Cooperation. Affected state agencies shall cooperate with and assist the lakes coordinator and the advisory committee in the development and implementation of lakes management plans established under RSA 483-A:7.

118:3 Reports. Proposed state level management criteria under RSA 483-A:5 shall be submitted by the lakes coordinator to the speaker of the house and president of the senate in the form of proposed legislation on or before December 1, 1991.

118:4 New Section; Rivers Management and Protection. Amend RSA 483 by inserting after section 13 the following new section:

483:14 Disposition of State Property. No state-owned property adjacent to or providing access to a river shall be disposed of by the state except upon the review and recommendation of the advisory committee.

118:5 Repeal. 1986, 190, relative to lakes and rivers deserving protection, is repealed.

118:6 Effective Date. This act shall take effect 60 days after passage.

APPROVED: APRIL 19, 1990

EFFECTIVE: JUNE 18, 1990

APPENDIX B

NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

**The Past and Present Members of the
Lakes Management Advisory Committee
and
The Meetings and Accomplishments of the
Lakes Management Advisory Committee**

The Past and Present Members of the Lakes Management Advisory Committee

<u>Name</u>	<u>Representing</u>
David Eastman Joseph Farrelly	NH Lakes Association
Peter B. Davis	State Conservation Committee
Clayton Phillips Clarence Howard	Fish and Game Commission
John Picard Presently Vacant	Elected Municipal Official of a Lakefront Community
Sarah Silk Presently Vacant	Conservation Commission of a Lakefront Community
James Haney, Ph.D. Alan Baker, Ph.D.	Scientific Community from the University of New Hampshire
Mildred Beach	Tourism Industry
David Harrigan Sydney Howe	Conservation Community
Jeffrey Thurston, Sr.	Marine Trades Association
Jeffrey Keeler Thomas Howard	NH Association of Realtors
Everett Pollard Nancy Marashio Presently Vacant	Member of a Planning Board of a Lakefront Community
Wendell Berry	NH Business and Industry Association
Dave Scott (Designee) Francesca Latawiec Mike Blake	Director, Office of State Planning
Charles Thoits (Designee) William Ingham Richard Tichko	Executive Director, Fish & Game Department
Joseph Quinn (Designee) Allison McLean	Commissioner, Dept. of Resources and Economic Development
Mark Gallagher (Designee)	Commissioner, Dept. of Safety
Richard Uncles (Designee)	Commissioner, Dept. of Agriculture
Frederic Murphy (Designee)	Commissioner, Dept. of Transportation

The Meetings and Accomplishments of the Lakes Management Advisory Committee

(March 1992 - March 1996)

1. Have had presentations by each of the seven participating state agencies, regarding that agency's role or multiple roles in lake management and protection. (April, June, July, October 1992; February and April 1994)
2. Site visit to Lake Winnepesaukee and Northwood Lake. Discussed carrying capacity and recreational uses of the lakes. Conducted water quality sampling of the lakes. (May 1992)
3. Site visit to Ossipee Lake. Discussed shorefront development activity, flooding characteristics unique to the lake, and the management of the dam. (June 1992)
4. Have had a hands-on presentation of the DES Boat Inspection Program. (July 1992)
5. Site visit to Lake Winnepesaukee with Marine Patrol on a summer weekend. Observed recreational demands on the lake, particularly the Weirs Beach area of the lake. (August 1992)
6. Have had a presentation regarding water control and management of Lake Umbagog by the Union Water Power Co. of Lewiston, Maine. (August 1992)
7. Have had a presentation regarding Maine's Lake Management and Protection Program by the Maine Department of Environmental Protection. (August 1992)
8. Site visit to Lake Umbagog. Discussed the cooperative land preservation agreement, the wildlife values of the lake and the management of the low impact campground. (August 1992)
9. Have had a presentation regarding the Comprehensive Shoreland Protection Act by DES and OSP. Discussed and made suggestions to DES for amendments to the Shoreland Protection Act, RSA 483-B. (September 1992)
10. Performed an indepth review of the proposed rule changes to the Wetlands Board, prepared by the Dock Working Group. Submitted testimony to the Wetlands Board regarding the proposed rule changes. (December 1992 - March 1993)
11. Have had a presentation regarding the water level management of Lake Massabesic by the Manchester Water Works and toured the Water Works facility. (May 1993)
12. Site visit to Squam Lake. Discussed the nature of non-obtrusive development upon a lake. (July 1993)
13. Site visit to Sunapee Lake. Discussed shoreland and upland development around the lake, and water quality monitoring efforts by the lake association. (August 1993)
14. Performed an indepth review and made follow-up recommendations to the 1984 Lakes and Great Ponds Report. (April - October 1993)
15. Compiled a draft document - Lakes Management and Protection Program Networking/Coordination Plan for all agencies dealing with lakes. (October - December 1993)
16. Have had a presentation regarding the June 1994 boat races on Lakes Opechee and Winnepesaukee by the New England Power Boat Racing Association. (February 1994)

17. Have had a presentation regarding the Squam Lakes Watershed Plan by the Office of State Planning. (May 1994)
18. Have had a presentation of the Lake Winnepesaukee Watershed Project by the technical cooperators working on this EPA funded non-point pollution source grant. (May 1994)
19. Compiled an outline - Lakes Management and Protection Program - The Elements and Objectives of the Program. (May 1994)
20. Site visit to Newfound Lake and presentation by the Newfound Lake Region Association regarding the regional watershed study. (July 1994)
21. Have had a presentation by the Vermont State Recreation Planner and the Director of the Vermont Water Resources Board regarding that state's efforts to address recreational use conflicts on their lakes. (August 1994)
22. Submitted 4 items as proposed legislation to the NH General Court for the 1996 Legislative Session. (June 1995)
23. Have had a presentation by NH Office of State Planning regarding Local Water Resources Management and Protection Plans. (September 1995)
24. Compiled a document - *Lakes Management Criteria for NH State Agencies*. (April 93 - December 1995)
25. Have had a presentation by DuBois and King (Environmental consultant to the NH Fish and Game Boating Access Program) regarding the methodology employed by Fish and Game to determine lake carrying capacity prior to the construction of a public boat launch. (January 1996)
26. Have begun developing the Guidelines for Local Lake Management and Shoreland Protection Plans. (March 1996)
27. The committee routinely discusses relevant legislation and any other issues pertinent to the lakes of New Hampshire. For example, the committee has discussed the Shoreland Protection Act and its amendments, legislation prohibiting the sale of certain products containing phosphorus, and the public access legislation. (Ongoing)

APPENDIX C

NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

Proposed Implementation Schedule for the Lakes Management Criteria for NH State Agencies

**Proposed Implementation Schedule
for the
Lakes Management Criteria for New Hampshire State Agencies
(see pages 1-16 for the Recommendations)**

<i>Page Numbers 1 and 2 - Subject: Water Quality; Recommendation Number</i>	<i>Statewide or Agency Specific</i>	<i>Target Year or Ongoing</i>	<i>Funding or Funding/Intern or Legislation</i>
Page 1 1.1	Statewide	1996	Legislation
2.1	Statewide	Ongoing (CORD)	None
2.2	Statewide	Ongoing (CORD)	Funding
3.1	Statewide	1996	None
4.1	Statewide	1996	Funding
5.1	Statewide	1996	None
6.1	Statewide	Ongoing	None
6.2	Statewide	Ongoing	None
Page 2 6.3	Statewide	1996	Funding
6.4	Statewide	Ongoing (CORD)	Funding
7.1	Statewide	1996 (CORD)	None
7.2	Statewide	1996	Legislation
7.3	Statewide	1996	Legislation
8.1	Statewide	Ongoing	None
8.2	Statewide	1997	Funding
9.1	Statewide	Ongoing	Legislation
9.2	Statewide	1997	Funding/Intern
10.1	Statewide	1997	Funding/Intern

Page Numbers 3 and 4 - Subject: Water Quality; Recommendation Number	Statewide or Agency Specific	Target Year or Ongoing	Funding or Funding/Intern or Legislation
Page 3 1.1	DES	Ongoing	None
2.1	DES	1997	None
3.1	DES	1998	Funding/Intern
4.1	DES	1998	Funding/Intern
5.1	DES	Ongoing	None
5.2	DES	Ongoing	Funding
5.3	DES	Ongoing	Funding
1.1	Fish & Game	Ongoing	None
2.1	Fish & Game	Ongoing	None
3.1	Fish & Game	Ongoing	None
Page 4 1.1	Department of Safety	Commencing in 1996	None
2.1	Department of Safety	1996	None
2.2	Department of Safety	Commencing in 1996	Funding
1.1	Office of State Planning	Ongoing	None
1.1	Department of Resources and Economic Development	Ongoing	None
1.1	Department of Agriculture and DES	Commencing in 1996	None
2.1	Department of Agriculture	1996	Funding/Intern

Page Numbers 5 and 6 - Subject: Potential Sources of Pollution; Recommendation Number	Statewide or Agency Specific	Target Year or Ongoing	Funding or Funding/Intern or Legislation
Page 5 1.1	Statewide	1996 (CORD)	None
1.2	Statewide	1997	Legislation
2.1	Statewide	Ongoing (CORD)	None
3.1	Statewide	Ongoing	None
3.2	Statewide	1996	Funding
4.1	Statewide	Ongoing (CORD)	None
5.1	Statewide	Ongoing (CORD)	None
6.1	Statewide	1996	Legislation
7.1	DES and Health and Human Services	1997	Funding
8.1	Statewide	1997 (CORD)	Funding/Intern
9.1	Statewide	Ongoing (CORD)	None
Page 6 1.1	DES	Ongoing	Funding
2.1	DES	Ongoing	None
3.1	DES	1998	Funding/Intern
4.1	DES	1998	Legislation
4.2	DES	Ongoing	None
5.1	DES	1997	None
6.1	DES	1996	Funding/Intern
7.1	DES	1996	Funding

Page Numbers 7 and 8 - Subject: Potential Sources of Pollution; Recommendation Number	Statewide or Agency Specific	Target Year or Ongoing	Funding or Funding/Intern or Legislation
Page 7 1.1	DOT	Commencing in 1997	None
1.2	DOT	Commencing in 1996	None
1.3	DOT	Ongoing	Funding
1.4	DOT	1996	None
2.1	DOT	Ongoing	Funding
3.1	DOT	Ongoing	None
3.2	DOT	Ongoing	Funding
1.1	Department of Agriculture	1996	Funding
1.2	Department of Agriculture	1997	Funding/Intern
Page 8 2.1	Department of Agriculture	1998	None
3.1	Department of Agriculture	1998	Funding
4.1	Department of Agriculture	Ongoing	Funding
1.1	Department of Safety	Commencing in 1996	None
1.1	Office of State Planning	1997	None

Page Numbers 9 thru 11 - Subject: The Environment for Wildlife; Recommendation Number	Statewide or Agency Specific	Target Year or Ongoing	Funding or Funding/Intern or Legislation
Page 9 1.1	Statewide	Ongoing (CORD)	Funding/Intern
1.2	Statewide	Ongoing (CORD)	None
2.1.	Statewide	Ongoing (CORD)	Funding
2.2	Statewide	Ongoing	None
2.3	Statewide	1996	Funding/Intern
3.1	Statewide	Ongoing	Legislation and Funding
Page 10 4.1	Statewide	Ongoing	None
4.2	Statewide	1997	None
5.1	Statewide	Ongoing	Legislation
1.1	Department of Resources and Economic Development and Fish & Game	1997	Funding
1.1	Fish & Game Department	1996	Funding
Page 11 2.1	Fish & Game Department	Ongoing	None
2.2	Fish & Game Department	1997	Funding
2.3	Fish & Game Department	1996	None
3.1	Fish & Game Department	Ongoing	Funding

Page Numbers 12 and 13 - Subject: Flood Protection, Public Water Supplies, and Flowage Rights; Recommendation Number	Statewide or Agency Specific	Target Year or Ongoing	Funding or Funding/Intern or Legislation
Page 12 1.1	Statewide	Ongoing	None
2.1	Statewide	If and when necessary	None
3.1	Statewide	1996	None
4.1	Statewide	Ongoing	None
6.1	Statewide	1998	Funding/Intern
7.1	Statewide	1996	Legislation and Funding
Page 13 1.1	DES	1996	None
1.2	DES	1997	Funding/Intern
2.1	DES	1997	Legislation
3.1	DES	Ongoing	None
3.2	DES	Ongoing	None

Page Numbers 14 thru 16 - Subjects: Public Access & Recreation Uses; Recommendation Number	Statewide or Agency Specific	Target Year or Ongoing	Funding or Funding/Intern or Legislation
Page 14 1.1	Statewide	Ongoing	None
2.1	Statewide	1996	None
3.1	Statewide	If and when necessary	None
3.2	Statewide	Ongoing	Funding
3.3	Statewide	Commencing in 1996	Funding
1.1	Fish & Game Department	If and when necessary	None
Page 15 1.1	Statewide	1996	Funding/Intern
1.2	Statewide	If and when necessary	None
2.1	Statewide		Funding
Page 16 1.1	DES	Commencing in 1996	Funding
1.1	Department of Safety	1996	Funding
1.2	Department of Safety	Ongoing	None
2.1	Department of Safety	1996	Funding/Intern
2.2	Department of Safety	1996	None

APPENDIX D

NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

The Elements and Objectives of the Program

NEW HAMPSHIRE LAKES MANAGEMENT AND PROTECTION PROGRAM

The Elements and Objectives of the Program

Element 1: *Lakes Management Criteria for NH State Agencies* (per RSA 483-A:5) for review and concurrence by the NH Council on Resources and Development (CORD), and consideration and adoption by the NH General Court.

- * The Lakes Coordinator and the Lakes Management Advisory Committee (LMAC) have reviewed, in detail, the recommendations of the 1984 *Lakes and Great Ponds Report* which was submitted to CORD. Based on that review, the Coordinator and the Committee have determined which of the recommendations from the Report are still applicable and have incorporated these recommendations, where appropriate, into the *Lakes Management Criteria for NH State Agencies*.
- * In addition to its comprehensive review of the *Lakes and Great Ponds Report*, the Committee has undertaken numerous efforts to educate itself regarding lake issues and concerns (see Appendix B). From these efforts, the committee has compiled a number of recommendations which have been incorporated into the *Lakes Management Criteria for NH State Agencies*.
- * Upon review and concurrence of the *Management Criteria* by CORD and review and adoption by the General Court, the Lakes Coordinator will assist the state agencies with the implementation of the *Lakes Management Criteria for NH State Agencies*.

Element 2: The Lakes Coordinator shall act as an information resource for state agencies when they are conducting an activity which may affect a lake. The Coordinator will be available to assist an agency to ensure that all appropriate steps, permits and notifications are obtained. The role of the Lakes Coordinator as an information resource will be presented to the NH Council on Resources and Development, for their information and concurrence.

- * The Coordinator and the Committee have been compiling a draft Networking/Coordination Plan for any and all actions which affect lakes. The Plan will incorporate the horizontal and vertical linkages necessary between and among the public and private sector to ensure that a comprehensive communication system is established to better facilitate actions and policies regarding the state lakes.
- * Using the Networking/Coordination Plan the state agencies will be able to follow a path of action and will also be provided a time frame for scheduling purposes. The Coordinator will provide technical assistance to the agencies as they accomplish their desired task.
- * The Coordinator will ensure that state agency actions are consistent with the *Lakes Management Criteria for NH State Agencies*.
- * This element will include all other recommendations made by the LMAC, in addition to those included in the *Management Criteria*, as well as the Guidelines for Local Lake Management Plans.

Element 3: Guidelines for Local Lake Management Plans (per RSA 483-A:7).

- * The Lakes Coordinator, in consultation with the Committee, the Rivers Coordinator, the Shoreland Coordinator, the Wetlands Bureau staff, and with the cooperation and assistance of OSP shall develop detailed Guidelines for coordinated lake management and shoreland protection plans together with recommendations for implementation.
- * Upon acceptance of the Guidelines by the Committee, the Coordinator and the Committee shall hold public hearings regarding the Guidelines.
- * All appropriate recommendations received from the public will be incorporated into the Guidelines.
- * The Lakes Coordinator will provide technical assistance to municipalities and lake associations with the adoption of Local Lake Management Plans.

Element 4: Legislation to be adopted or amended by the NH General Court.

- * The Lakes Coordinator has reviewed the state statutes and has composed a list of lake related legislation. This list has been distributed to the Lakes Management Advisory Committee.
- * The Coordinator and the Committee shall review this list of legislation and shall make recommendations where appropriate.
- * The Committee shall submit to the General Court for their review and consideration, any lake related legislation which the LMAC feels should be adopted and/or amended.

Element 5: The Carrying Capacity and Visitor Impact Management of New Hampshire's Lakes.

- * Per RSA 483-A:5.f.: Recreation uses of lakes shall be consistent with the carrying capacity and character of each lake and shall include, but not be limited to, the use of appropriate watercraft, swimming, and fishing. Permitted uses shall provide the opportunity for the safe enjoyment of a variety of lake experiences within the state as a whole.
- * The Coordinator and the Committee, in cooperation with appropriate state agencies and other organizations, will develop a process where the compatibility of recreation uses on public waters can be observed and measured. Recreational carrying capacity is not an absolute number but rather a range of values which is related to specific management objectives for a given lake. This process and management objectives will be included in the Guidelines for Local Lake Management Plans.
- * The Coordinator will provide technical assistance to municipalities and lake associations, to determine carrying capacity values and to develop impact management strategies.